

AR 15-6 INVESTIGATION

MAKUA MILITARY RESERVATION Rx BURN/FIRE

EXHIBIT 56

VOLUME I

REPORT OF PROCEEDINGS BY INVESTIGATING OFFICER OR BOARD OF OFFICERS

For use of this form, see AR 15-6; the proponent agency is OTJAG.

IF MORE SPACE IS REQUIRED IN FILLING OUT ANY PORTION OF THIS FORM, ATTACH ADDITIONAL SHEETS

SECTION I - APPOINTMENT

Appointed by COL Charles N. Cardinal, Chief of Staff, 25th Infantry Division (Light), USARHAW, Schofield Bks, HI 96587
(Appointing authority)

on 14 August 2003 (Date) (Attach inclosure 1: Letter of appointment or summary of oral appointment data.) (See para 3-15, AR 15-6.)

SECTION II - SESSIONS

The (investigation) (board) commenced at 45th CSG(F) Group Commander's Office at 0900
(Place) (Time)

on 15 August 2003 (Date) (If a formal board met for more than one session, check here ☐. Indicate in an inclosure the time each session began and ended, the place, persons present and absent, and explanation of absences, if any.) The following persons (members, respondents, counsel) were present: (After each name, indicate capacity, e.g., President, Recorder, Member, Legal Advisor.)

The following persons (members, respondents, counsel) were absent: (Include brief explanation of each absence.) (See paras 5-2 and 5-8a, AR 15-6.)

The (investigating officer) (board) finished gathering/hearing evidence at 1330 on 4 September 2003
(Time) (Date)
and completed findings and recommendations at 1200 on 10 September 2003
(Time) (Date)

SECTION III - CHECKLIST FOR PROCEEDINGS

A. COMPLETE IN ALL CASES

	YES	NO ^{1/}	NA ^{2/}
1 Inclosures (para 3-15, AR 15-6)			
Are the following inclosed and numbered consecutively with Roman numerals: (Attached in order listed)			
a. The letter of appointment or a summary of oral appointment data?	X		
b. Copy of notice to respondent, if any? (See item 9, below)			X
c. Other correspondence with respondent or counsel, if any?			X
d. All other written communications to or from the appointing authority?			X
e. Privacy Act Statements (Certificate, if statement provided orally)?			X
f. Explanation by the investigating officer or board of any unusual delays, difficulties, irregularities, or other problems encountered (e.g., absence of material witnesses)?	X		
g. Information as to sessions of a formal board not included on page 1 of this report?			X
h. Any other significant papers (other than evidence) relating to administrative aspects of the investigation or board?			X

FOOTNOTES: ^{1/} Explain all negative answers on an attached sheet.

^{2/} Use of the N/A column constitutes a positive representation that the circumstances described in the question did not occur in this investigation or board.

Makua Valley Military Reservation Prescribed Burn/Wildfire – 22 July 2003

1. **Background.** This investigation is based on the events that occurred during a prescribed burn and subsequent wildfire that occurred 22 July 2003 on Makua Military Reservation (MMR), a training facility for 25th Infantry Division (L) and United States Army Hawaii (USARHAW).

2. **Summary.** A combination of human error; inadequate communication capabilities at MMR; problems with command and control/synchronization of fire fighting assets; failure to fully utilize aviation assets to suppress the fire; and an unpredictable and unusual change in wind speed and direction resulted in an escape fire from the prescribed burn area developing into a wild land fire.

3. General Findings.

a. Prescribed Burning is defined as the controlled application of fire to wildland fuels (vegetation) in either a natural or modified state. By definition it is conducted under specific environmental conditions, which allow the fire to be confined to a predetermined area and at the same time produce the intensity required to attain planned resource management objectives.

b. Prescribed burns have been used at MMR for over two decades as a land management tool. USARHAW established policy and fixed responsibility for Wildfire Management Programs and prescribed burns in April of 2000. In September of 2002, the Army Assistant Chief of Staff for Installation Management (ACSIM) established Wildland Fire Policy guidance for all Army installations. A review of these policies and the over 40 regulations that govern Wildfire Management on Army installations indicates that USARHAW has been consistent over time in its application of this policy guidance and regulations. (Exhibits; 2-6, 18, 20, 25, 26, 28)

c. Prescription burning when used as a land management tool to reduce fuel load reduces the risk of accidental fires caused by authorized military training. A reduced fuel load in the maneuver training area creates conditions where:

- 1) The likelihood of an accidental fire is reduced because of the reduction in fuels.
- 2) If an accidental fire does occur, the reduced fuel load reduces the possibility of the fire escaping and becoming a wildfire.
- 3) Immediate fire suppression efforts to stop an accidental fire are most effective because of the reduction in fuels.

d. The purpose of the prescribed burn on 22 July 2003 was to:

- 1) Reduce the present fuel load; and
- 2) Burn the vegetation well enough to achieve "an enhanced ground visibility result" to safely allow the Army to conduct unexploded ordnance (UXO) clearance 1000 meters mauka of Farrington Highway and conduct archaeological surveys within designated Surface Danger Zone

4. **Specific Findings.** The following are specific findings as requested by the appointing authority in the appointment memorandum, APVG-CS, Subject: Appointment of Investigating Officer – Makua Valley Fire 22-24 July 2003, dated: 14 August 2003.

a. What written prescribed burn plan(s) controlled this prescribed burn?

Finding. Makua Prescribed Burn Plan, Makua Military Reservation (MMR) 03-01 for 1000 Meter Unexploded Ordnance (UXO) and Surface Danger Zone (SDZ) Archaeological Clearance was the controlling plan for the prescribed burn. The G3/DPTM, Range Division coordinated the MMR Prescribed Burn Plan through the Installation Fire & Safety Office (IFSO), 706th Explosive Ordnance Detachment (EOD), and the Directorate of Public Works (DPW), Environmental Office, U.S. Army Garrison, Hawaii. The Army also coordinated with the following federal, state, city and local agencies: the Federal Fire Department; City & County of Honolulu Fire Department; State of Hawaii, Department of Land & Natural Resources, Division of Forestry & Wildlife; State of Hawaii, Department of Health; U.S. Forest Service, Region 5; and the U.S. Fish & Wildlife Service. Note: this plan mirrors the requirements directed in the Pre-final Draft Wildlife Fire Management Plan from the Center of Excellence for Military Management of Land, Colorado State University. Specifically, Annex D, Prescribed Fire Program and Chapter 4.4. (Exhibits; 2-7, 10, 18, 25-28)

b. Were the controlling plan(s) properly executed? Specifically, were all firefighting assets prescribed by the controlling plan(s) on site, available, and properly used to combat the fire?

Findings:

1) Multiple statements indicate that MMR 03-01 was not properly executed as planned. (Exhibits; AA-EE, HH, JJ)

2) Multiple statements indicate that all firefighting assets were on site or on standby (CH-47 at WAAF). (Exhibits; AA-DD, GG, JJ)

c. If not, how and why were the controlling plan(s) not properly executed?

Findings:

1) Multiple statements indicate that a lack of reasonable vigilance by the hold crews was a contributing cause of the escape fire. This lack of reasonable vigilance by the hold crew was a contributing factor delaying the initial response to the escape fire. This is best supported by photos taken at the location where the fire escaped showing two hold crews in a stationary position in direct line of sight of the escape fire. (Exhibits; 1)

2) Multiple statements indicate that communications between MMR, Installation Operation Center and Aviation Brigade were delayed thus delaying the response of the CH-47 located at WAAF on standby. (Exhibits; See MMR Rx Burn Chronology).